



GSM Controller RTU5010

User Manual

Ver 2.54 Date Issued: 2010-11-08

All Rights Reserved by King Pigeon Hi-Tech. Co., Ltd.

Website: [Http://www.GSMalarmsystem.com](http://www.GSMalarmsystem.com)

CONTENTS

| | | |
|------------|---|----------|
| I | Preface..... | 3 |
| | Package list..... | 3 |
| II | Introduction..... | 4 |
| | Features | 4 |
| | Parameter | 5 |
| | Apparent size | 6 |
| | Terminal Description..... | 6 |
| III | Configuration guide of RTU5010 | 8 |
| | 3.1 Access setup mode..... | 8 |
| | 3.2 Add “CS number” | 9 |
| | 3.3 Basic parameter configuration..... | 10 |
| | 3.4 Parameters for alarm | 11 |
| | 3.5 ALL SMS..... | 13 |
| | 3.6 CS’s authority..... | 13 |
| | 3.7 Inputs_Outputs types | 15 |
| | 3.8 Define alarm and recover sms of digital input | 16 |
| | 3.9 Digital inputs timeouts | 17 |
| | 3.10 Config digital inputs/outputs name | 18 |
| | 3.11 CS’s DIN authority..... | 18 |
| | 3.12 Buzzer..... | 19 |
| | 3.13 Tmp100 sensor (optional) | 19 |
| | 3.14 Internal battery (optional) | 19 |
| | 3.15 Realtime Interlock | 21 |
| | 3.16 Timers | 22 |
| | 3.17 Weekly Timers..... | 23 |
| | 3.18 Program Interlock..... | 23 |
| | 3.19 Define users commands | 24 |

I Preface

Thank you for using the RTU5010 GSM RTU. You will know well about the functions and operation methods of this product quickly through this User's Manual.

This product is mainly used for remote alarming and control application based on GSM network. Please use it according to the parameters and technical specifications in the User's Manual. Meanwhile, the Notes shall be considered for the usage of radio-control products, especially GSM products. Our Company bears no liability for property loss or bodily injury arising from abnormal or incorrect usage of this product.

Package list



GSM RTU



RS232 cable



12V Adaptor



GSM antenna

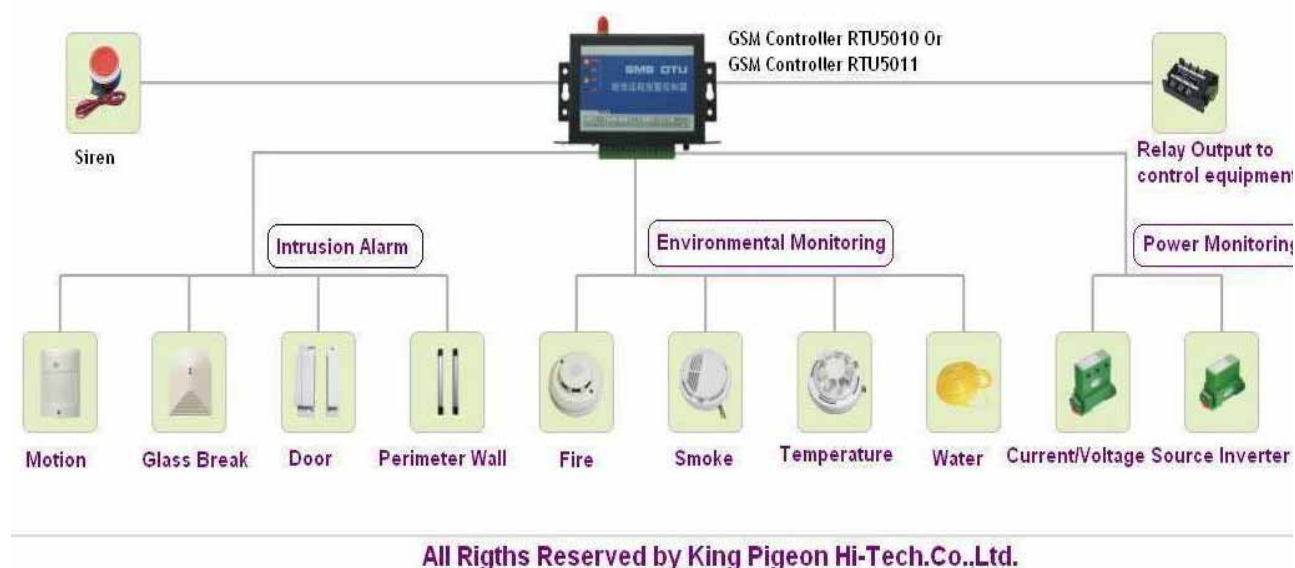


CD

II Introduction

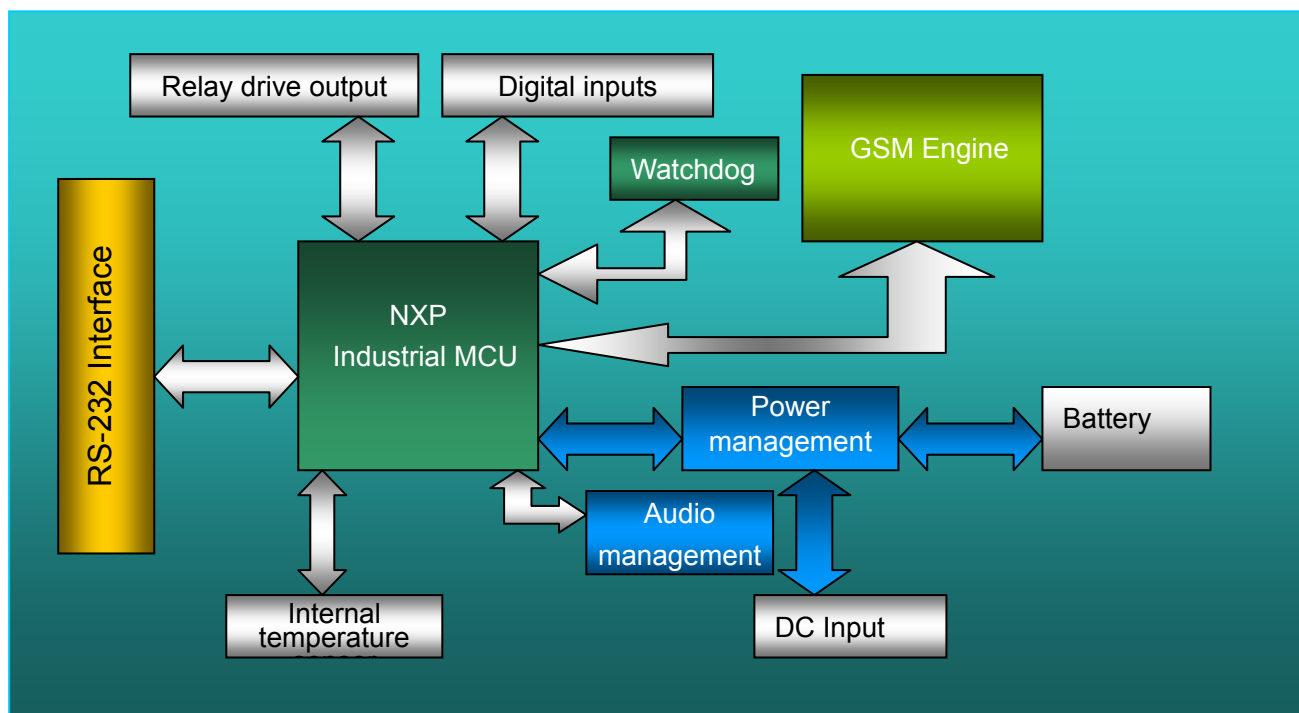
RTU5010 sms alert Gateway is designed as a cost effective remote control system alert device. It monitors up to 4 dry contacts and 4 drivable relay outputs. User-defined SMS is sent to pre-configure mobile phone numbers when a pre-defined alarm condition happens. These pre-configured mobile phone numbers can belong to technicians or engineers who are responsible in handling corresponding alarms. With the aid of this gateway, the alarm condition brings attention to in-charge personnel immediately. Besides it allows those mobile phone users to trigger any relay output by using SMS. The output can be connected with alarm indication device, such as alarm, and others.

There is a built-in microprocessor chip running on a real-time operating system. It gives immediate response to any change in both inputs and outputs condition. A GSM modem is embedded in the gateway, user has to subscribe a SIM card for the gateway. The gateway can be installed in any location under GSM coverage.



Features

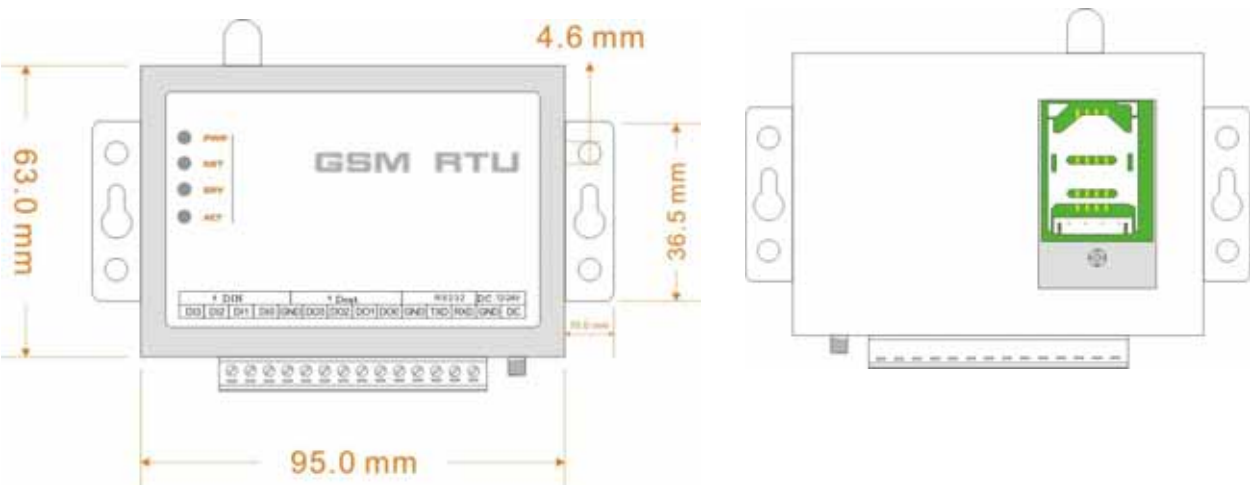
- 4 digital inputs, connect dry contact device
- 4 relay drivable outputs(12V-24V) , drive electricity <0.2A
- Reliable performance with built-in double watchdog
- Automatic device condition report through SMS every 24 hour interval
- User-defined alarm condition (normally close or open), alarm and recovery SMS message for each alarm point; Supporting drive relay output
- Maximum of 10 mobile phone numbers can be programmable
- Supporting voice monitoring
- Inside temperature sensor (optional)
- Being available for internal battery and providing power cut off alarm (optional)
- Configuration can be done via COM port.



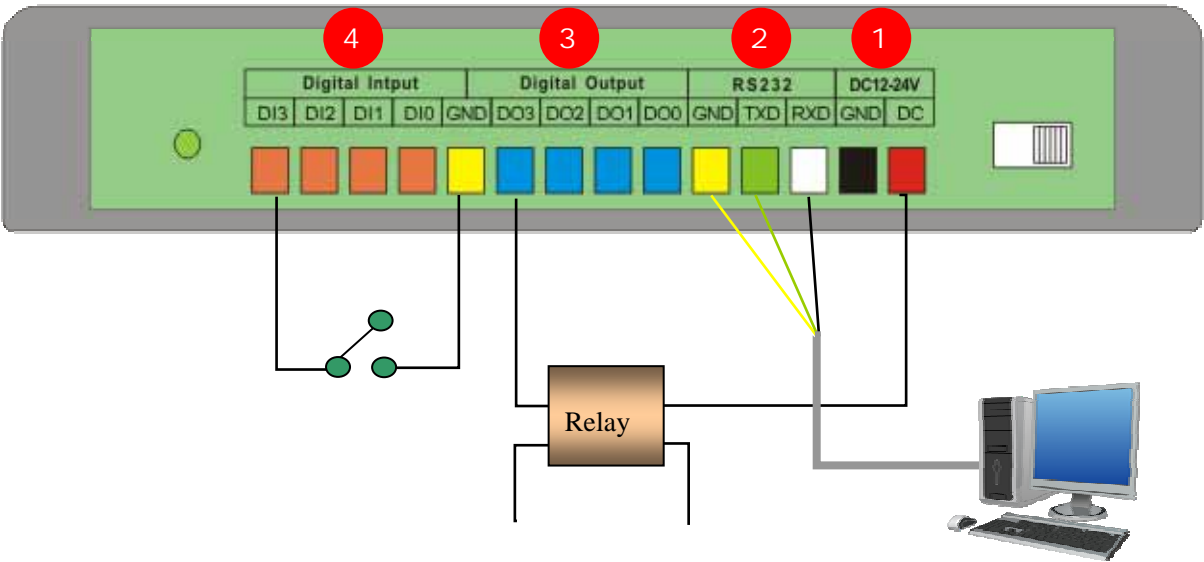
Parameter

| Parameter item | Reference scope |
|------------------------|---|
| DC Power supply | 12-24V DC (Standard adapter: DC 12V/1.5A) |
| Power consumption | 12V input Max. 50mA/Average 50mA |
| Frequency range | Dual-frequency 900/1800 or 900/1800/850/1900 |
| SIM Card | Supporting 3V SIM Card |
| Antenna | 50 Ω SMA Antenna interface |
| Serial | RS232 |
| Temperature range | -20-+70 $^{\circ}\text{C}$ |
| Humidity range | Relative humidity 95% |
| Output drive voltage | Equal to input DC voltage |
| Output drive power | Drive voltage $\leq 35\text{V}$, drive current $\leq 200\text{mA}$ |
| On state input current | Max. 0.33mA |
| Input signal | Dry contact |
| Exterior dimension | 95×64×25mm |
| Weight | 225 g |

Apparent size



Terminal Description



1. [DC12-24V]

| Terminal | Description |
|----------|---|
| DC | positive terminal of the DC power supply (+) |
| GND | Negative terminal of the DC power supply (-) |

2. [RS232] :Connecting computer RS232 to config

3. **4 relay drivable output:** driving relay close or open, Output drive voltage Equal to input DC voltage
Positive pole of relay coil connecting DC, negative pole of relay coil connecting DO,

4. **4 Digital input:** Digital input connecting open or close contact

LED indicator descriptions

| Indicator | Status | Indication descriptions |
|-------------------------|--------------------------|--|
| PWR (Red) | Normally light on | Indicator for power supply, which will be light on when the system is power on |
| NET (Green) | Flicker | SMS module signal indicator, which will flicker slowly after the system is registered in GSM network |
| SRV (Yellow) | Light on during handling | It will be light on when the system receives or sends short messages and light off when the handling is over |
| ACT (Orange) | Flicker | It will flicker periodically when the system is under operation, and the interval time is 6 sec |
| Side led (green) | Light on or off | Light on during the internal battery is charge up |

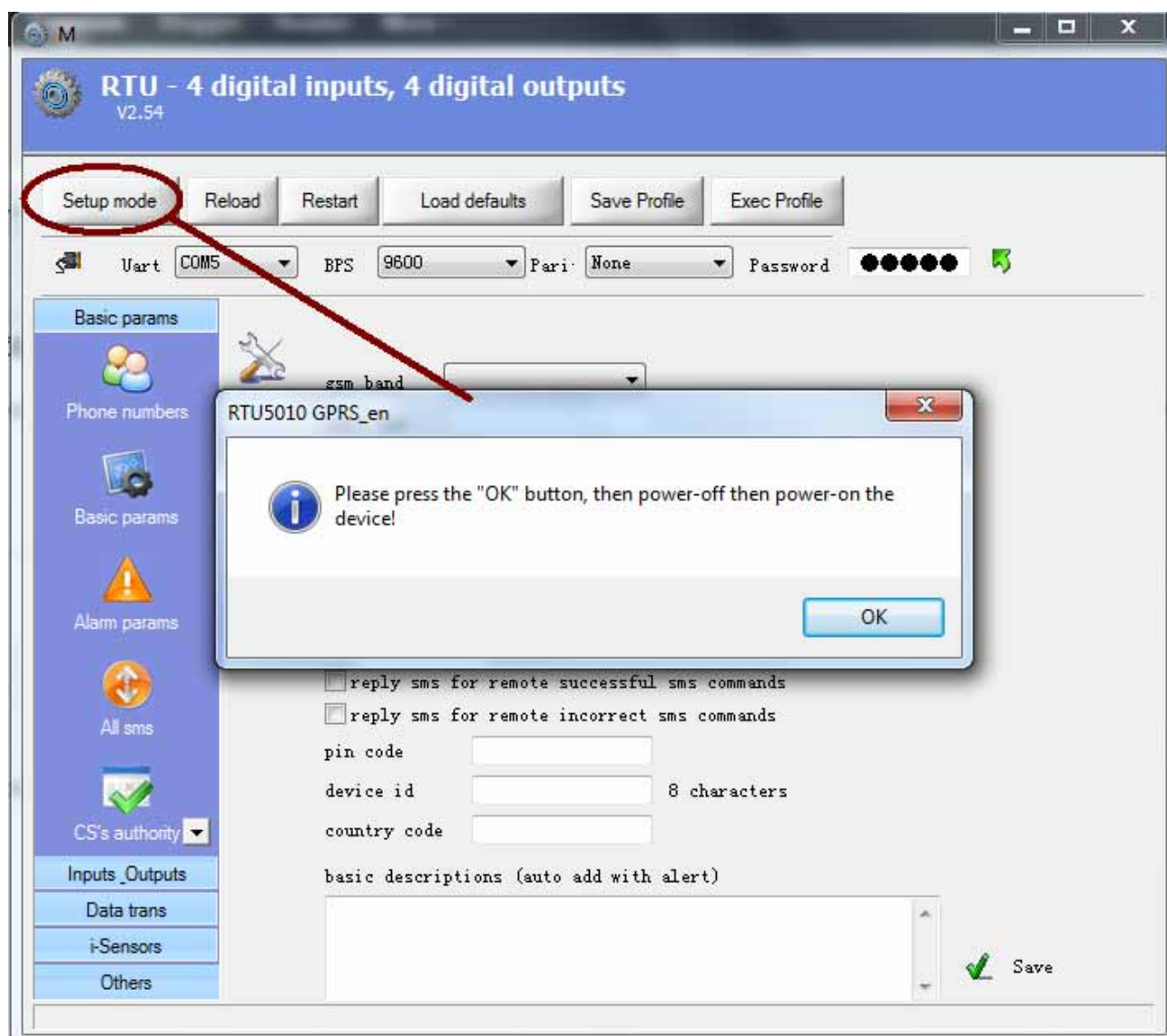
III Configuration guide of RTU5010

Basic Parameters

3.1 Access setup mode

Connect RTU5010 with RS232 of the computer and open the configuration software, make RTU5010 access setup mode according to the following figure.

⚠ Note: Please choose the serial port No. and rate correctly, the default communication rate is 9600; default password is "000000"



- Tips:**
1. Please ensure the Com port is correct. you can find out it at the Computer's Device Manager;
 2. then please switch off the RTU, and click the Setup Mode button, then click the pop-up windows' Ok.
 3. Switch on the RTU, then you can enter into the setup mode.

Definition: Working mode and setup mode

In setup mode, all functions are disabled, only to set parameters. And RTU5010 must be restart to enter working mode.

In working mode, all functions is enabled, the RTU5010 can alarm and control.

⚠ NOTE

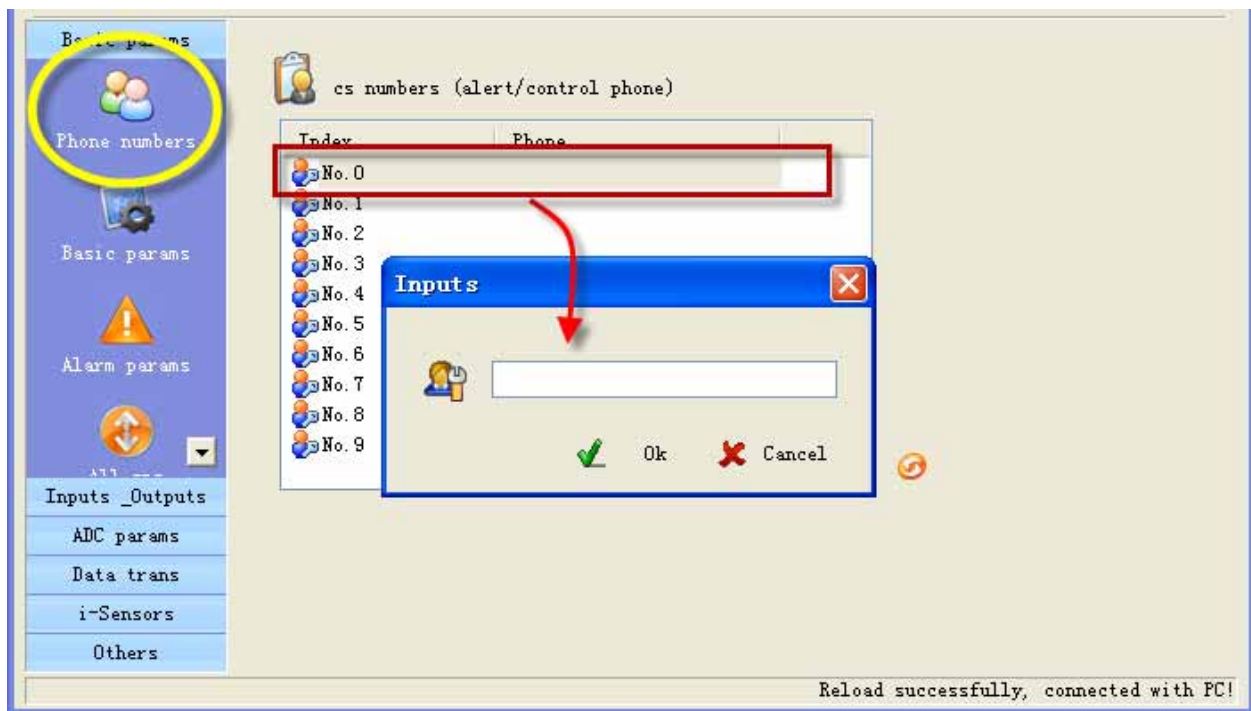
Access setup mode, the simcard and antenna is no need, but access working mode, the simcard and antenna is necessary.

⚠ How to know current mode:

Check the ACT light, if the ACT light flickers twice per second that means it is under the setup mode currently; the flicker period of the ACT light can be up to 6 sec under the working mode.

3.2 Add “CS number”

RTU5010 under working mode, the “CS number” can send sms commands to control RTU5010 and receive RTU5010 sms (include alarm sms, report sms etc). User can set 10 CS numbers, CS0-CS9



3.3 Basic parameter configuration

Basic params

Phone numbers

Basic params

Alarm params

All sms

CS's authority

Inputs _Outputs

ADC params

Data trans

i-Sensors

Others

gsm band

uart bps 9600

uart NONE

☐ alarm when gsm signal low 11

☒ daily report at 10/a.m.

☐ send prooftime sms to cs when powerup

☒ send prooftime sms to sp when powerup

sp number 10086

☒ reply sms for remote successful sms commands

☒ reply sms for remote incorrect sms commands

pin code 1234

device id 8 characters

country code

basic descriptions (auto add with alert)

Save

Reload successfully, connected with PC!

Attention : gsm band, uart bps, uart, pin code, country code please using the default parameter

1. Alarm for GSM signal low: GSM signal normal range is 18-32 , RTU5010 will send alarm sms to user when RTU5010's GSM signal value below 11

2. Daily report: When the daily report function is used, RTU5010 will send a report sms to all CS numbers at 10:00 every morning for reporting current states, through which the user can make sure the normal operation of RTU5010.

3. Prooftime

Prooftime is keeping the RTU5010's os (operation system) has correct time. RTU5010 can execute daily report, timing arm or disarm, timing output at correct time.

Send prooftime sms to cs when powerup: when RTU5010 powerup, it send a sms to CS0 to request prooftime, CS0 can reply sms"999" to RTU5010 to complete prooftime.

Send prooftime sms to sp when powerup: sp number is a service number of GSM operator, when RTU5010 powerup, it send a sms to sp, and waiting sp reply a sms to complete prooftime.

Attention : if GSM operator has not provide sp number or such services, you need not enable the option

4. Device description: you can add description with RTU5010 (such as install position , user information),the description will show in sms which RTU5010 send to you

5. Device ID: The device ID is a 8-byte ASCII characters which will be showed in the short-message received by CS, for example:

3.4 Parameters for alarm

Basic params

Phone numbers

Basic params

Alarm params

All sms

Inputs _Outputs

ADC params

Data trans

i-Sensors

Others

☐ ring(phone call) when alert

☒ auto answer call of service phonenumber

☒ auto add basic description with alert sms

☐ print RTU alarm events by com port

delay send sms time when alarm (sec)

holding time after disarm (sec)

when alert, sms resend times

Extend information with report

☒ Interior temperature ☒ Device's memo info ☐ AD0

☒ Device Id ☒ Power supply status ☐ AD1

☒ Arm status ☐ AD2

☒ Signal of gsm network ☒ Alarm digital inputs ☐ AD3

Save

Reload successfully, connected with PC!

1. ring when alert

Enable this option, RTU5010 will give CS number a phone call then send sms when alarm

2. auto answer call for service phonenumber

Enable this option, RTU5010 can auto answer call for service phone number, RTU5010 need not enable the option.

3. Auto add basic description with alert sms

Enable this option, the description (such as install position, user information) that have been defined by user will show in sms which RTU5010 send to service phone number.

4. print RTU alarm events by com port

Enable this option, when RTU5010 alarm, it send the alarm data to com port in RTU_IO data format

5. Arm delay and disarm delay

Define the time of "delay send sms time when alarm" (disarm delay time), in this way, you have an enough time to set RTU5010 in disarm mode when you go into the monitor area.

Define the time of "holding time after disarm" (arm delay time), in this way, you have an enough time to set RTU5010 in arm mode when user leave the monitor area.

6. Extend information with report

RTU can send report sms to cs phones by timer or user's inquiry by sms command, this function is designed to let user have chance to know the RTU is stilling working and main status of the RTU.

Extend information with report

| | | |
|---|--|------------------------------|
| <input checked="" type="checkbox"/> Interior temperature | <input checked="" type="checkbox"/> Device's memo info | <input type="checkbox"/> AD0 |
| <input checked="" type="checkbox"/> Device Id | <input checked="" type="checkbox"/> Power supply status | <input type="checkbox"/> AD1 |
| <input checked="" type="checkbox"/> Arm status | | <input type="checkbox"/> AD2 |
| <input checked="" type="checkbox"/> Signal of gsm network | <input checked="" type="checkbox"/> Alarm digital inputs | <input type="checkbox"/> AD3 |

Multi parameters can be selected into daily report, include:

a. Interior temperature: if your's RTU5010 has added internal temperature sensor, the temperature value will show in the daily report.

Attention : A standard RTU5010 have not internal temperature sensor

b. Device Id: enable this option, ID will show in the daily report.

c. Arm status: enable this option, arm or disarm status will show in the daily report.

d. Signal of gsm network: enable this option, GSM signal value will show in the daily report.

e. Device's memo info: enable this option, Device description will show in the daily report.

f. Power supply status: enable this option, the daily report will show power supply status

g. Alarm digital inputs: enable this option, all digital input status (on or off) will show in the daily report.

h. AD0~AD3: those options is invalid for RTU5010

From: +8613570810254

Equipment Id: 00000001

Time: 9:58

Signal value: 27

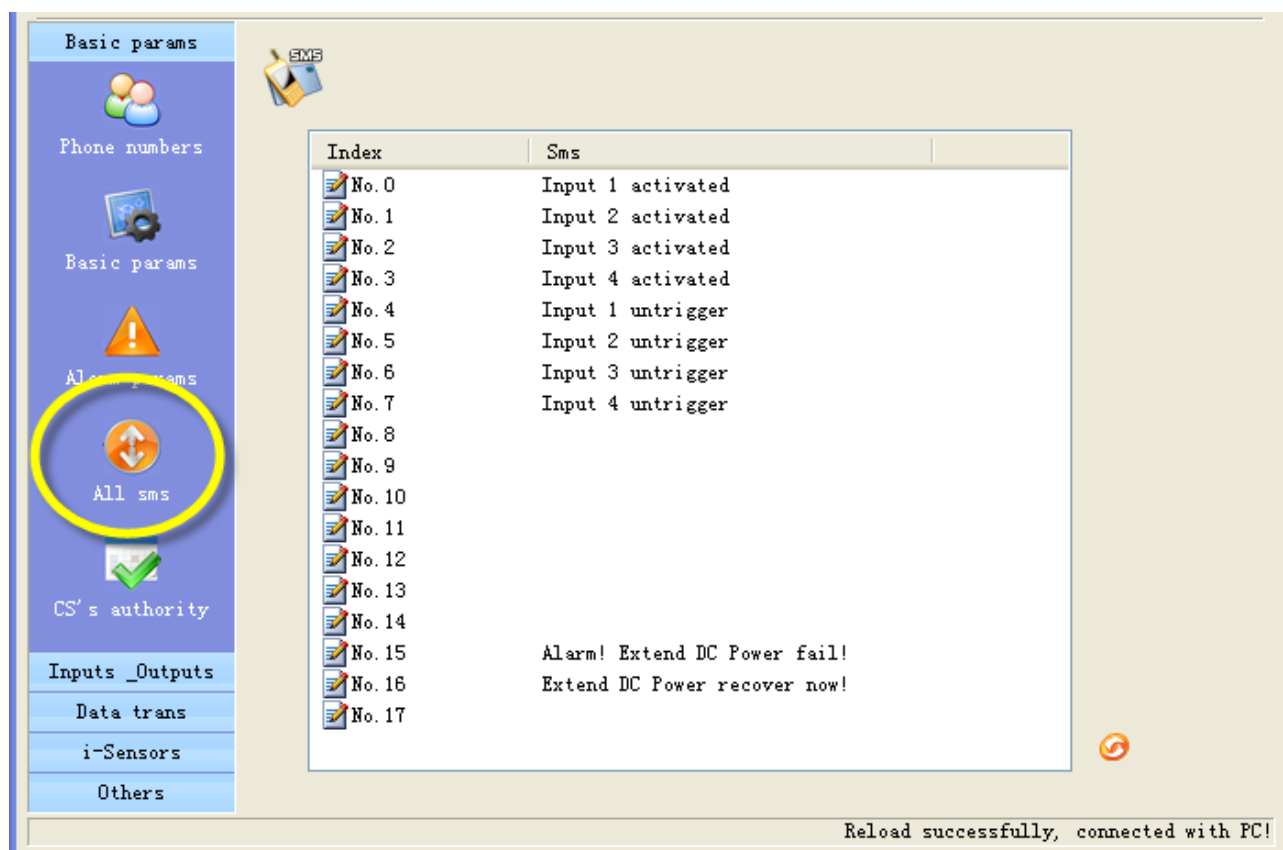
Power supply: Normal

Computer temperature: 30.5

Description: Machine Room

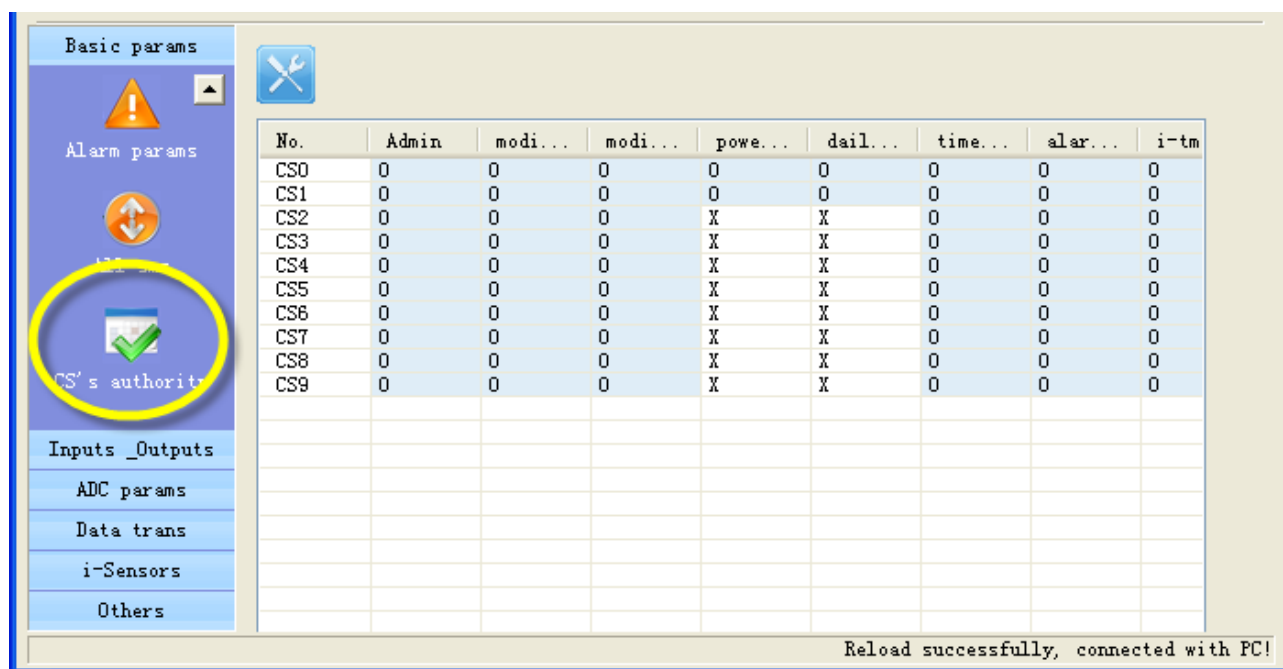
A1, Floor 4, Building 3

3.5 ALL SMS



In this page, you can see all sms contents that you have defined, include digital inputs alarm/recover sms, AD inputs alarm/recover sms etc. you can Double-click it to modify.

3.6 CS's authority



The explanation of the CS's authority ("O" is enable, "X" is disable)

| Authority | Explanation |
|-------------------|--|
| admin | Can Arm/disarm or not |
| Modify by sms | This CS number can be modify by sms command or not |
| Modify servers | This CS number can modify other CS number by sms command or not |
| Powerup sms | Can receive the status sms or not when RTU is restarted by sms command |
| Daily report | Can receive the daily report or not |
| Timer mms | Null |
| Alarm mms | Null |
| I-tmp sms | Can receive the alarm sms or not when internal temperature sensor alarm |
| I-tmp ring | Can receive the alarm phone call or not when internal temperature sensor alarm |
| Battery fail sms | Can receive the alarm sms of power failure or not |
| Battery fail ring | Can receive the alarm phone call of power failure or not |
| Signal low alarm | Null |
| Sample sms | Null |
| M2M svr | Null |
| Arm notify | Null |
| PC alarm | Null |

Inputs_Outputs

3.7 Inputs_Outputs types

The screenshot shows the 'Inputs_Outputs' configuration window. On the left, a sidebar contains icons for 'Basic params', 'Input_output type' (highlighted with a yellow circle), 'Input alarm sms', 'Input timeouts', 'Digital inputs name', 'Digital output name', 'Data trans', 'i-Sensors', and 'Others'. The main area is divided into three sections: 'switching inputs' with a table for inputs 0-3, 'relay driveable outputs' with a table for outputs 0-3, and 'current status' showing the state of inputs and outputs. A 'Save' button is at the bottom right, and a status bar at the very bottom indicates 'Reload successfully, connected with PC!'.

| Input | Input_output type | 24 Hours | Sound |
|---------|-----------------------|--------------------------|-------------------------------------|
| input 0 | TO CLOSE ALARM (EDGE) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| input 1 | TO CLOSE ALARM (EDGE) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| input 2 | TO CLOSE ALARM (EDGE) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| input 3 | TO CLOSE ALARM (EDGE) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Output | Output type |
|----------|-------------|
| output 0 | 1:OC |
| output 1 | 1:OC |
| output 2 | 1:OC |
| output 3 | 1:OC |

Current status:
 0input: open
 1input: open
 2input: open
 3input: open
 0output: off
 1output: off
 2output: off
 3output: off

Other:
 Persist timespan of Siren (min): 15

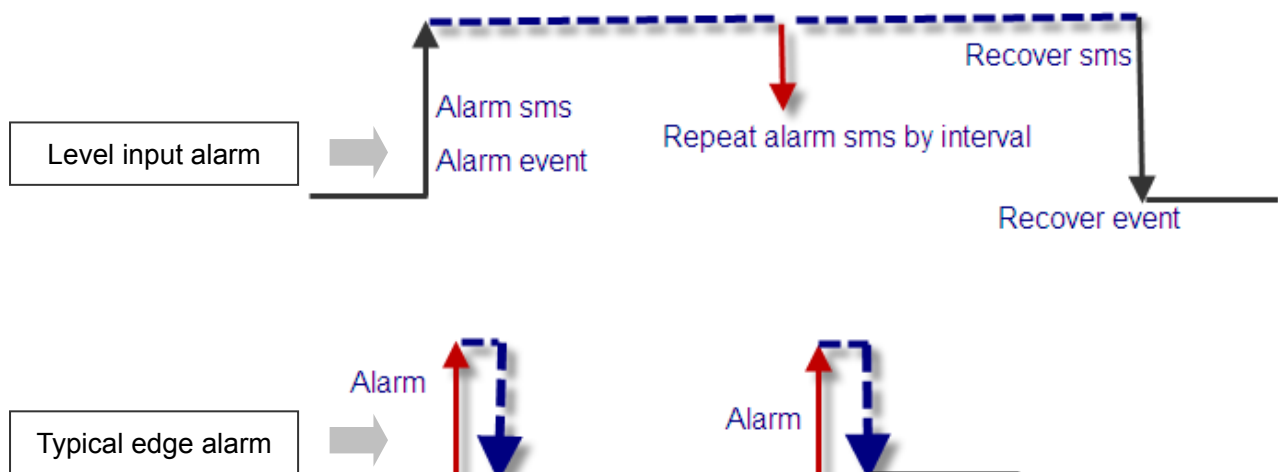
Save

Reload successfully, connected with PC!

Digital inputs types

RTU5010 provide 4 digital inputs, input signals can be divided into two types, EDGE_IN (edge triggering) and LEVEL_IN (state triggering).

ATTENTION: The key difference between Level and Edge is Level input has recovery notify message and Level inputs can repeat alarm status sms notify by an interval.



“24 Hours” property: If checked, the digital input will execute alarm action (send alarm sms, interlock etc) when it is triggered, even RTU5010 is in disarm status.

“Sound” property:

Means this line alarm event will cause internal buzzer and extend buzzer or siren action.

“Use digital input 1 as arm control” property:

Enable this option, RTU5010 is in arm mode if digital input 1 is opened, RTU5010 is in disarm mode if digital input 1 is closed, so user can connect a button to switch mode for arm or disarm

ATTENTION: Use digital input1 as arm control you need select the type of input1 is “TO CLOSE ALARM (LEVEL)” and delete the alarm/recover sms of input 1

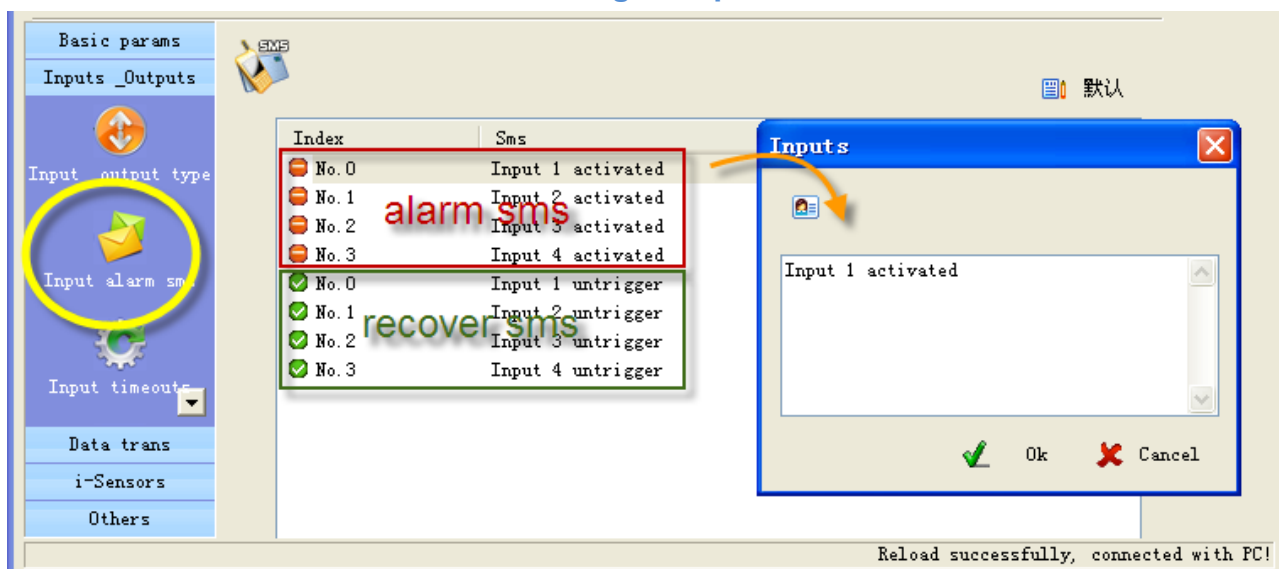
Output types

| | | |
|---|-----------------------|--|
| 0 | disable | |
| 1 | relay drivable output | 4 relay drivable outputs , drive electricity <0.2A Output drive relay voltage Equal to input DC voltage Output power: Drive voltage ≤35V, drive current ≤200mA |
| 2 | Buzzer | This line’s actions will synchronize with internal buzzer. |
| 3 | SNAPSHOT | This line wills shortly action when any alarm happens. |
| 4 | SIREN | This line continuous drives for 1 minute by default. And the interval can be user define. |

Remember outputs status

RTU5010’s outputs default status is open; it is possible closed during working. After restart, the outputs will be reset, status is open. If check the option, output can recover the status that before restart.

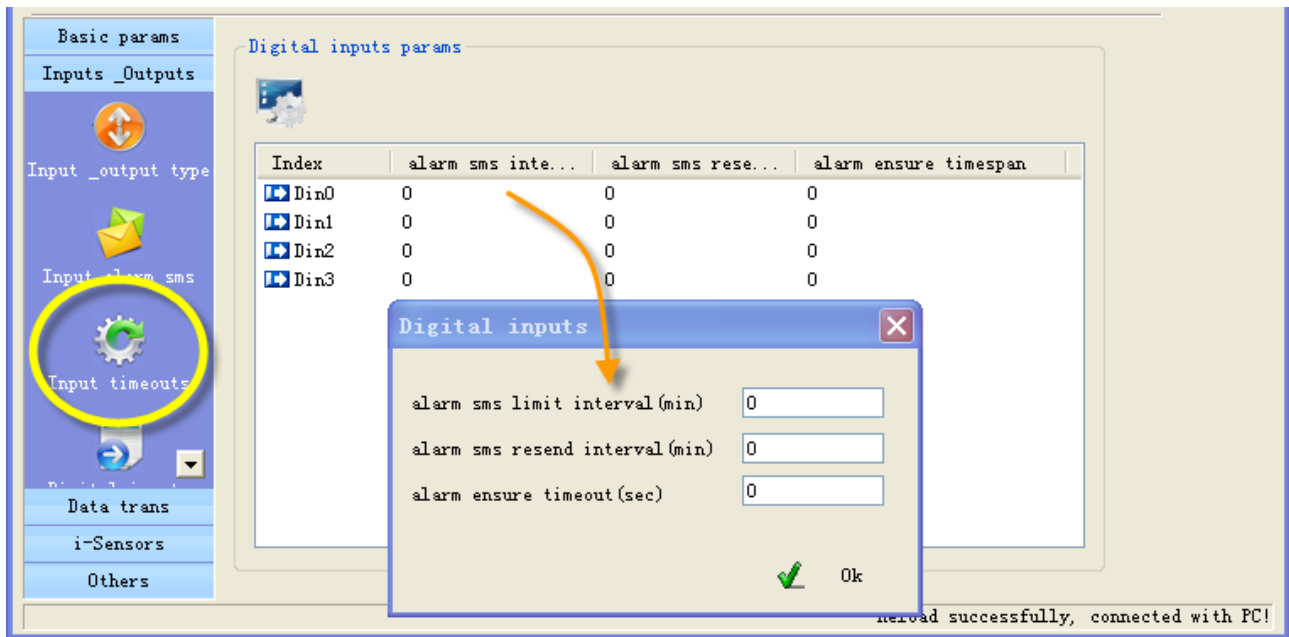
3.8 Define alarm and recover sms of digital input



All of the input line sms can be modify and re-define.

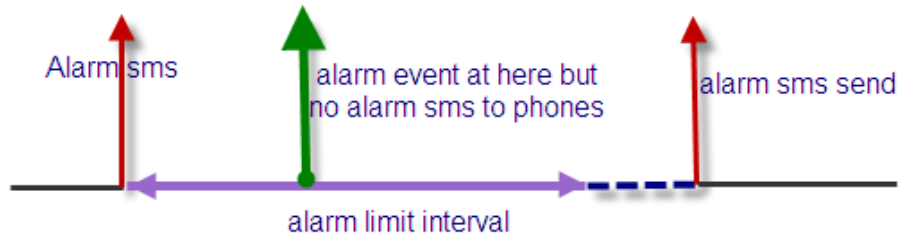
ATTENTION: a SMS composed of not more than 60 characters

3.9 Digital inputs timeouts

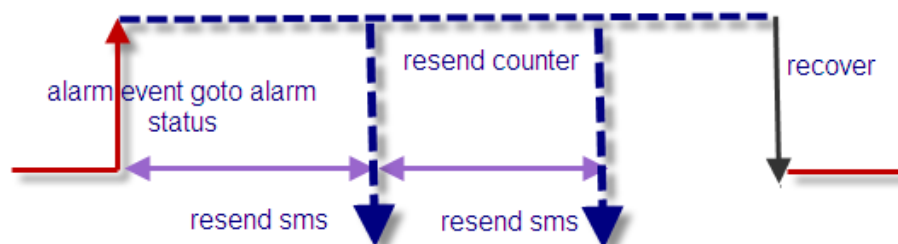


This page designed to setup input timeouts property. There are 3 interval related with inputs.

1. Alarm sms limit interval designed to avoid amounts of alarm/recover sms in a short time.



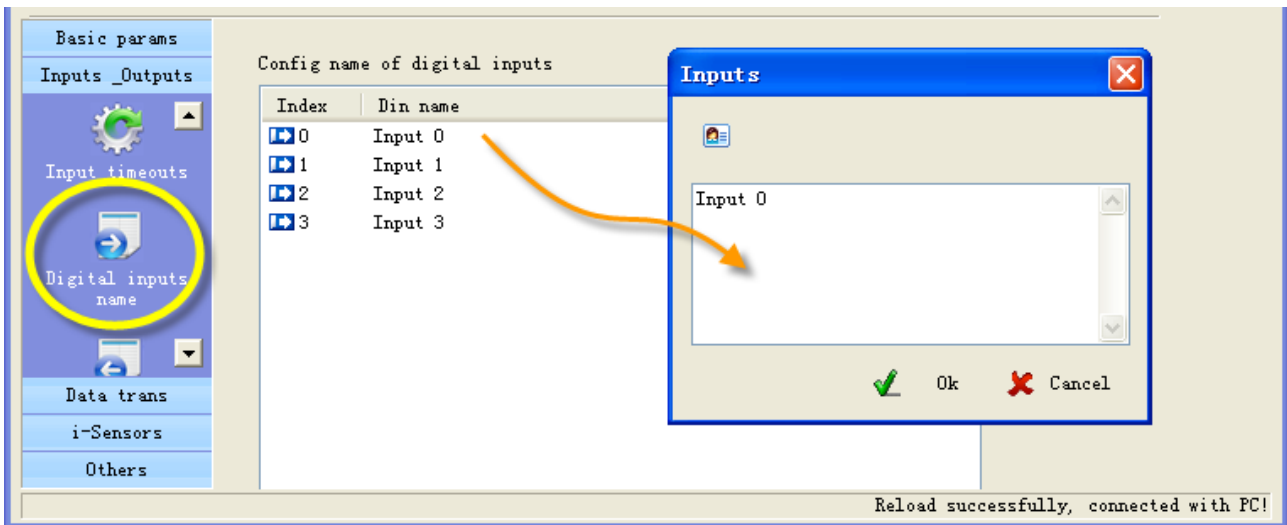
2. Alarm sms resend interval designed for repeat alarm status notifies to phones, 0 means disable repeat notification.



3. Alarms ensure timeouts is a counter of alarm status ensure timer, designed to avoid shake mistakes. 0 means no counter.



3.10 Config digital inputs/outputs name



If you send sms command to require inputs status, there is a contrast of returning

from : +8613570810254
 High voltage : normal
 Low voltage : alarm
 High water level : normal
 Low water level : normal

Have configed input name

from : +8613570810254
 Input 0 : normal
 Input 1 : alarm
 Input 2 : normal
 Input 3 : normal

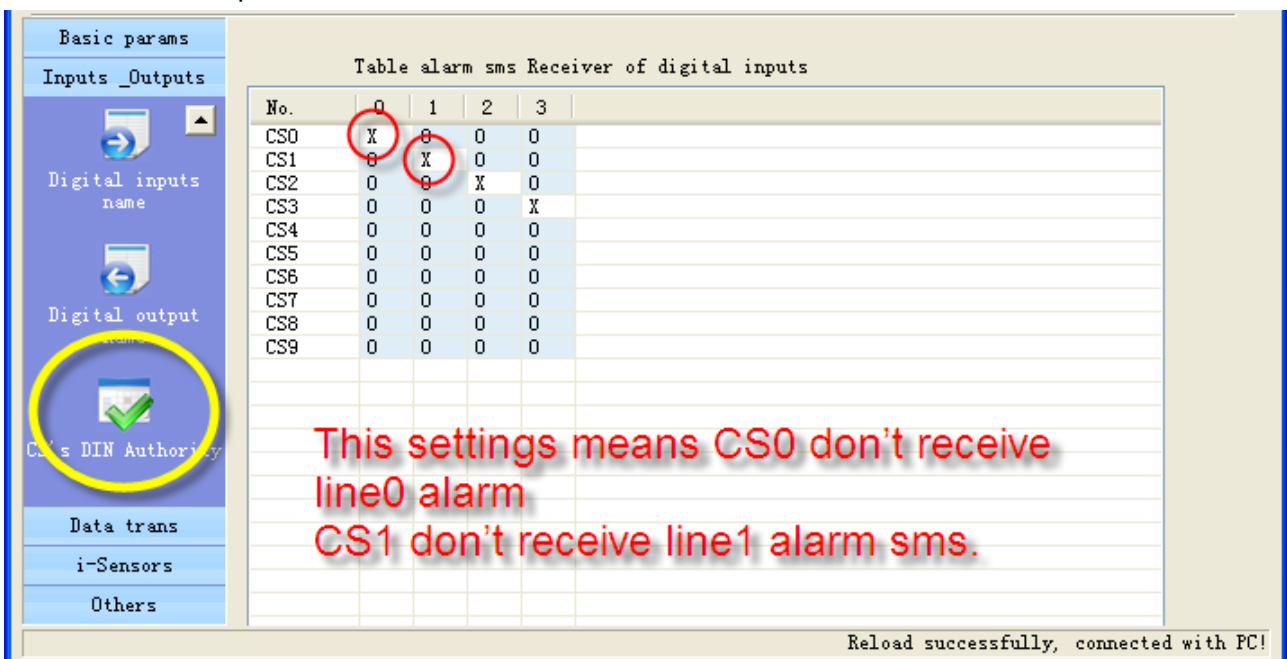
Have not configed input name

Config outputs name is same

3.11 CS's DIN authority

This page can setup the table of CS phone receive digital input line in alarm property.

“O” means this Cs phone will receive related line in sms, “X” means not.



I-sensors

3.12 Buzzer

RTU5010 have no buzzer; need not to config the parameters.

3.13 Tmp100 sensor (optional)

Basic params
Inputs _Outputs
ADC params
Data trans
i-Sensors
Buzzer
Tmp100 sensor
Internal battery
Others

interior temperature sensor

high alert 0 centigrade
low alert 0 centigrade
Adjust 0 centigrade
current centigrade
Timespan of twice alarm sms(min) 0
Timespan of resend alarm sms (min) 0
Time of ensure alarm (sec) 60
☒ Enable temperature sensor alarm
☒ Temperature sensor alarm is urgency 24 hours
☒ Enable Temperature Sound alarm
Save Clear
Reload successfully, connected with PC!

TMP100 as an optional temperature sensor can inside RTU5010; you can preset a high and a low temperature value, if temperature is over normal range, RTU5010 alarm. You can send sms command to RTU5010 to get current temperature value.

User can set "Adjust" value to calibrating temperature value

1. TMPAS time: timespan of twice alarm

TMPAS time is designed to avoid amounts of alarm/recover sms in a short time.

2. TMPRS time: timespan of resend alarm sms

Designed for repeat alarm status notifies to phones, 0 means disable repeat notification.

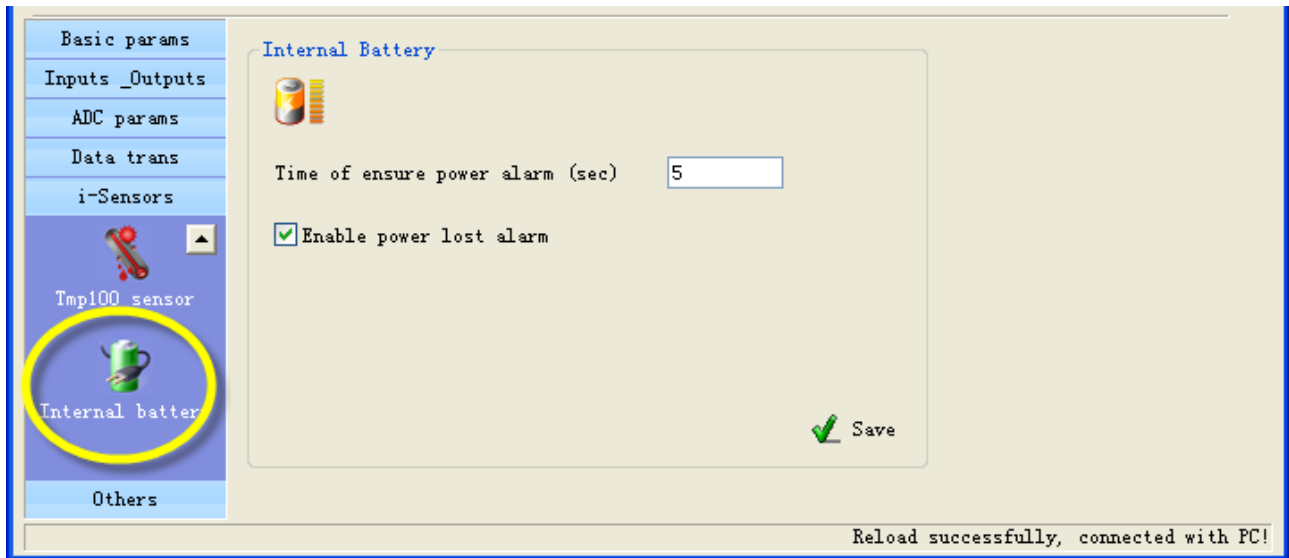
3. TMPDLY time: time of ensure alarm

It is a counter of alarm status ensure timer, designed to avoid shake mistakes. 0 means no counter.

3.14 Internal battery (optional)

The internal battery is optional attachment; it is designed to realize power lost alarm

When external power cut off, RTU5010 Powered by internal battery and alarm to user



POWDLY time: time of ensure power alarm

When the time of external power lost is over POWDLY time, RTU5010 alarm, "0" is disable

Battery parameter:

- Lithium battery
- Voltage: 3.7V
- Capacity: 800mAh
- Limited voltage for charging 4.2V
- Implementation standard GB/T 18287-2000

Others setting

3.15 Realtime Interlock

| Output | When alert | When recover | Link with |
|--------|------------|--------------|-----------|
| No. 0 | 1: CLOSE | n: NONE | NONE |
| No. 1 | 1: CLOSE | n: NONE | NONE |
| No. 2 | 1: CLOSE | n: NONE | NONE |
| No. 3 | 1: CLOSE | n: NONE | NONE |

dirver pulse interval(sec)

Save

Reload successfully, connected with PC!

Realtime interlock is a local strategy, it is designed to outputs execute action automatically under some internal triggering conditions,

For example

If digital input 0 alert, output 0 close pulse 5 seconds

| Output | When alert | When recover | Link with |
|--------|----------------|--------------|---------------|
| No. 0 | 2: CLOSE PULSE | n: NONE | 0 INPUT ALERT |
| No. 1 | 1: CLOSE | n: NONE | NONE |
| No. 2 | 1: CLOSE | n: NONE | NONE |
| No. 3 | 1: CLOSE | n: NONE | NONE |

dirver pulse interval(sec)

Save

3.16 Timers

Basic params
Inputs_Outputs
ADC params
Data trans
i-Sensors
Others

Real-time clock
Timers
Weekly timer
Comm tool

System timers

| | | | | | | | |
|--------|----|---|------|---|--------|------|------|
| Timer0 | at | 0 | hour | 0 | minute | exec | None |
| Timer1 | at | 0 | hour | 0 | minute | exec | None |
| Timer2 | at | 0 | hour | 0 | minute | exec | None |
| Timer3 | at | 0 | hour | 0 | minute | exec | None |
| Timer4 | at | 0 | hour | 0 | minute | exec | None |
| Timer5 | at | 0 | hour | 0 | minute | exec | None |

Minutes Timers

| | | | | | |
|-------|-----|---|--------|------|------|
| Span0 | per | 0 | minute | exec | None |
| Span1 | per | 0 | minute | exec | None |
| Span2 | per | 0 | minute | exec | None |
| Span3 | per | 0 | minute | exec | None |

Second timers

| | | | | | |
|--------|-----|---|---------|------|------|
| Timer0 | per | 0 | seconds | exec | None |
| Timer1 | per | 0 | seconds | exec | None |
| Timer2 | per | 0 | seconds | exec | None |
| Timer3 | per | 0 | seconds | exec | None |

Save

Reload successfully, connected with PC!

Timers is designed to time execute task, task include arm, disarm, open/close output etc.

System timers

6 times can be set in a day, RTU5010 execute a task in each time.

For example, at 8:30 execute arm, at 17:00 execute disarm.

System timers

| | | | | | | | |
|--------|----|----|------|----|--------|------|--------|
| Timer0 | at | 8 | hour | 30 | minute | exec | Arm |
| Timer1 | at | 17 | hour | 00 | minute | exec | Disarm |
| Timer2 | at | 0 | hour | 0 | minute | exec | None |
| Timer3 | at | 0 | hour | 0 | minute | exec | None |
| Timer4 | at | 0 | hour | 0 | minute | exec | None |
| Timer5 | at | 0 | hour | 0 | minute | exec | None |

Minutes timers

Set minutes value for the timers, RTU5010 execute a task every the interval time.

For example, RTU5010 execute output 0 pulse every 30 minutes

Minutes Timers

| | | | | | |
|-------|-----|----|--------|------|-----------|
| Span0 | per | 30 | minute | exec | Pulse D00 |
| Span1 | per | 0 | minute | exec | None |
| Span2 | per | 0 | minute | exec | None |
| Span3 | per | 0 | minute | exec | None |

Second timers

Set second value for the timers, RTU5010 execute a task every the interval time.

ATTENTION: before you the timers, you have to update RTU5010's clock, the method of update clock please see "Basic parameter configuration" above

3.17 Weekly Timers

Basic params
Inputs _Outputs
ADC params
Data trans
i-Sensors
Others
Timers
Comm tool

Weekly timer

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Save

Reload successfully, connected with PC!

7 times can be set in a week, RTU5010 execute a task in each time.

For example, at Monday 10:30 execute send daily report

Date Monday 10 hour 30 min execute SEND DIALY REPOI

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

Date Sunday 0 hour 0 min execute NONE

3.18 Program Interlock

Basic params
Inputs _Outputs
ADC params
Data trans
i-Sensors
Others
Comm tool
Program Interlock
User commands

Programable Interlock

| Index | On Event | Execute command |
|-------|----------|-----------------|
| Aa0 | NC | NC |
| Aa1 | NC | NC |
| Aa2 | NC | NC |
| Aa3 | NC | |
| Aa4 | NC | |
| Aa5 | NC | |
| Aa6 | NC | |
| Aa7 | NC | |
| Aa8 | NC | |
| Aa9 | NC | |
| Aa10 | NC | |
| Aa11 | NC | |
| Aa12 | NC | |
| Aa13 | NC | NC |
| Aa14 | NC | NC |

Event POWERUP

Action OUTPUT PULSE

OK Cancel

Reload successfully, connected with PC!

Program interlock is a local strategy; it is stronger and more flexible than realtime interlock. You can set RTU5010 execute many actions automatically according to various types of system events. If event happens, RTU5010 execute action.

For example, if RTU5010 powerup, output 0 pulse 1 second

3.19 Define users commands

Users can define 6 commands instead of system commands.

For example, user set “close” instead of system command “IOOH”, so user can send “close” to close output

